

What is Claimed is:

1. A duplex system having a first wireless LAN base station and a second wireless LAN base station,

wherein each of the first wireless LAN base station
5 and the second wireless LAN base station comprises:

a fault detecting section for detecting a fault of a local wireless LAN base station and generating a fault detection signal;

a duplex control section for storing an address of a
10 duplex party of the wireless LAN base station, sending and receiving a control signal to and from the duplex party, and controlling each of sections according to the control signal;

a power control section for placing the local wireless
15 LAN base station in an active state or a standby state according to a command received from the duplex control section; and

a setting control section for storing setting of the local wireless LAN base station and sending and receiving
20 the setting of the local wireless LAN base station according to a command received from the duplex control section,

wherein when the first wireless LAN base station which is in the active state detects a fault, the first wireless
25 LAN base station is configured to send an activation request to the second wireless LAN base station which is in the standby state

wherein when the first wireless LAN base station confirms that the second wireless LAN base station has been placed in the active state, the first wireless LAN base station is configured to send setting thereof to the second
5 wireless LAN base station, and

wherein when the first wireless LAN base station confirms that the setting of the second wireless LAN base station is the same as the setting of the first wireless LAN base station, the first wireless LAN base station is
10 configured to be placed in the standby state.

2. A duplex system having a first wireless LAN base station, a second wireless LAN base station, and a management server,

wherein each of the first wireless LAN base station
15 and the second wireless LAN base station comprises:

a fault detecting section for detecting a fault of a local wireless LAN base station and generating a fault detection signal;

a duplex control section for storing an address of the
20 management server, sending and receiving a control signal to and from the management server, and controlling each of sections according to the control signal;

a power control section for placing the local wireless LAN base station in an active state or a standby state
25 according to a command received from the duplex control section; and

a setting control section for storing setting of the

local wireless LAN base station and sending and receiving the setting according to a command received from the duplex control section,

wherein the management server comprises:

5 a server side duplex control section for storing each address of the first wireless LAN base station and the second wireless LAN base station, sending and receiving a control signal to and from each of the first wireless LAN base station and the second wireless LAN base station, and
10 controlling each of sections according to the control signal,

wherein when the first wireless LAN base station which is in the active state detects a fault thereof, the first wireless LAN base station is configured to send a fault
15 detection notice to the management server and the management server is configured to send an activation request to the second wireless LAN base station which is in the standby state,

wherein when the management server confirms that the
20 second wireless LAN base station has been placed in the active state, the management server is configured to send a setting data request to the first wireless LAN base station, the first wireless LAN base station is configured to send setting thereof to the management server, and the
25 management server is configured to send the setting of the first wireless LAN base station to the second wireless LAN base station, and

wherein when the management server confirms that the setting of the second wireless LAN base station is the same as the setting of the first wireless LAN base station, the management server is configured to send a standby request
5 to the first wireless LAN base station and the first wireless LAN base station is configured to be placed in the standby state.

3. A duplex system having a first wireless LAN base station and a second wireless LAN base station,

10 wherein each of the first wireless LAN base station and the second wireless LAN base station comprises:

a fault detecting section for detecting a fault of a local wireless LAN base station and generating a fault detection signal;

15 a duplex control section for storing an address of a duplex party of the wireless LAN base station, sending and receiving a control signal to and from the duplex party, and controlling each of sections according to the control signal;

20 a power control section for placing the local wireless LAN base station in an active state or a standby state according to a command received from the duplex control section; and

a setting control section for storing setting of the
25 local wireless LAN base station and sending and receiving the setting of the local wireless LAN base station according to a command received from the duplex control

section,

wherein when the first wireless LAN base station which is in the active state detects changed setting, the first wireless LAN base station is configured to send changed
5 setting data to second wireless LAN base station which is in the standby state, the second wireless LAN base station is configured to reflect the received changed setting data in setting of the second wireless LAN base station,

wherein when the first wireless LAN base station
10 detects a fault, the first wireless LAN base station is configured to send an activation request to the second wireless LAN base station, and

wherein when the first wireless LAN base station confirms that the second wireless LAN base station has been
15 placed in the active state, the first wireless LAN base station is configured to be placed in the standby state.

4. A duplex system having a first wireless LAN base station, a second wireless LAN base station, and a management server,

20 wherein each of the first wireless LAN base station and the second wireless LAN base station comprises:

a fault detecting section for detecting a fault of a local wireless LAN base station and generating a fault detection signal;

25 a duplex control section for storing an address of the management server, sending and receiving a control signal to and from the management server, and controlling each of

sections according to the control signal;

a power control section for placing the local wireless LAN base station in an active state or a standby state according to a command received from the duplex control
5 section; and

a setting control section for storing setting of the local wireless LAN base station and sending and receiving the setting according to a command received from the duplex control section,

10 wherein the management server comprises:

a server side duplex control section for storing each address of the first wireless LAN base station and the second wireless LAN base station, sending and receiving a control signal to and from each of the first wireless LAN
15 base station and the second wireless LAN base station, and controlling each of sections according to the control signal,

wherein when the first wireless LAN base station which is in the active state detects changed setting, the first
20 wireless LAN base station is configured to send changed setting data to the management server, the management server is configured to send the changed setting data to the second wireless LAN base station which is in the standby state, and the second wireless LAN base station is
25 configured to reflect the received changed setting data in setting thereof,

wherein when the first wireless LAN base station

detects a fault, the first wireless LAN base station is configured to send a fault detection notice to the management server and the management server is configured to send an activation request to the second wireless LAN
5 base station, and

wherein when the management server confirms that the second wireless LAN base station has been placed in the active state, the management server is configured to send a standby request to the first wireless LAN base station and
10 the first wireless LAN base station is configured to be placed in the standby state.

5. A duplex system having a first wireless LAN base station, a second wireless LAN base station, and a management server,

15 wherein each of the first wireless LAN base station and the second wireless LAN base station comprises:

a fault detecting section for detecting a fault of a local wireless LAN base station and generating a fault detection signal;

20 a duplex control section for storing an address of the management server, sending and receiving a control signal to and from the management server, and controlling each of sections according to the control signal;

a power control section for placing the local wireless
25 LAN base station in an active state or a standby state according to a command received from the duplex control section;

a setting control section for storing setting of the local wireless LAN base station and sending and receiving the setting according to a command received from the duplex control section,

5 wherein the management server comprises:

a server side duplex control section for storing each address of the first wireless LAN base station and the second wireless LAN base station, sending and receiving a control signal to and from each of the first wireless LAN
10 base station and the second wireless LAN base station, and controlling each of sections according to the control signal; and

a setting storing section for storing changed setting data of a wireless LAN base station which is in the active
15 state,

wherein when the first wireless LAN base station which is in the active state detects changed setting, the first wireless LAN base station is configured to send changed setting data to the management server and the management
20 server is configured to store the changed setting data in the setting storing section,

wherein when the first wireless LAN base station detects a fault, the first wireless LAN base station is configured to send a fault detection notice to the
25 management server and the management server is configured to send an activation request to the second wireless LAN base station which is in the standby state,

wherein when the management server confirms that the second wireless LAN base station has been placed in the active state, the management server is configured to send the changed setting data stored in the setting storing
5 section to the second wireless LAN base station, and

wherein when the management server confirms that the setting of the second wireless LAN base station is the same as the setting of the first wireless LAN base station, the management server is configured to send a standby request
10 to the first wireless LAN base station and the first wireless LAN base station is configured to be placed in the standby state.

6. The duplex system as set forth in claim 3,
wherein the duplex control section of the first
15 wireless LAN base station which is in the standby state, or the management server is configured to periodically confirm whether the wireless LAN base station which is in the active state is alive, and

wherein when the duplex control section confirms that
20 the wireless LAN base station which is in the active state has not been alive a predetermined number of times, the duplex control section is configured to place in the active state the second wireless LAN base station which is in the standby state.

25 7. The duplex system as set forth in claim 4,
wherein the duplex control section of the first wireless LAN base station which is in the standby state, or

the management server is configured to periodically confirm whether the wireless LAN base station which is in the active state is alive, and

wherein when the duplex control section confirms that
5 the wireless LAN base station which is in the active state has not been alive a predetermined number of times, the duplex control section is configured to place in the active state the second wireless LAN base station which is in the standby state.

10 8. The duplex system as set forth in claim 5,
wherein the duplex control section of the first wireless LAN base station which is in the standby state, or the management server is configured to periodically confirm whether the wireless LAN base station which is in the
15 active state is alive, and

wherein when the duplex control section confirms that the wireless LAN base station which is in the active state has not been alive a predetermined number of times, the duplex control section is configured to place in the active
20 state the second wireless LAN base station which is in the standby state.

9. A duplex system having a wireless LAN base station which is in an active state and a management server,

wherein the wireless LAN base station comprises:
25 a fault detecting section for detecting a fault of the local wireless LAN base station and generating a fault detection signal;

a duplex control section for storing an address of the management server, sending and receiving a control signal to and from the management server, and controlling each of sections according to the control signal;

5 a power control section for placing the local wireless LAN base station in an active state or a standby state according to a command received from the duplex control section; and

10 a setting control section for storing setting of the local wireless LAN base station and sending and receiving the setting according to a command received from the duplex control section,

wherein the management server is configured to have stored a mail address of a manager who receives a fault,
15 and

wherein when the management server receives the fault detection notice, the management server is configured to send a fault detection notice to the mail address of the manager.

20 10. The duplex system as set forth in claim 1,

wherein the fault detecting section has a fault predicting function, and

wherein when the fault detecting section predicts a fault, the duplex control section is configured to send a
25 fault prediction notice to the management server or the wireless LAN base station which is in the standby state, and the management server or the wireless LAN base station

which is in the active state is configured to perform an activating process for the wireless LAN base station which is in the standby state.

11. The duplex system as set forth in claim 2,
5 wherein the fault detecting section has a fault predicting function, and

wherein when the fault detecting section predicts a fault, the duplex control section is configured to send a fault prediction notice to the management server or the
10 wireless LAN base station which is in the standby state, and the management server or the wireless LAN base station which is in the active state is configured to perform an activating process for the wireless LAN base station which is in the standby state.

12. The duplex system as set forth in claim 3,
15 wherein the fault detecting section has a fault predicting function, and

wherein when the fault detecting section predicts a fault, the duplex control section is configured to send a
20 fault prediction notice to the management server or the wireless LAN base station which is in the standby state, and the management server or the wireless LAN base station which is in the active state is configured to perform an activating process for the wireless LAN base station which
25 is in the standby state.

13. The duplex system as set forth in claim 4,
wherein the fault detecting section has a fault

predicting function, and

wherein when the fault detecting section predicts a fault, the duplex control section is configured to send a fault prediction notice to the management server or the wireless LAN base station which is in the standby state, and the management server or the wireless LAN base station which is in the active state is configured to perform an activating process for the wireless LAN base station which is in the standby state.

10 14. The duplex system as set forth in claim 5,

wherein the fault detecting section has a fault predicting function, and

wherein when the fault detecting section predicts a fault, the duplex control section is configured to send a fault prediction notice to the management server or the wireless LAN base station which is in the standby state, and the management server or the wireless LAN base station which is in the active state is configured to perform an activating process for the wireless LAN base station which is in the standby state.

15 15. The duplex system as set forth in claim 9,

wherein the fault detecting section has a fault predicting function, and

wherein when the fault detecting section predicts a fault, the duplex control section is configured to send a fault prediction notice to the management server or the wireless LAN base station which is in the standby state,

and the management server or the wireless LAN base station which is in the active state is configured to perform an activating process for the wireless LAN base station which is in the standby state.

5 16. The duplex system as set forth in claim 10,
 wherein the wireless LAN base station which is in the active state has a communication monitoring section for monitoring a communication state of the local wireless LAN base station, and

10 wherein when the local wireless LAN base station predicts a fault, the communication monitoring section is configured to confirm that there is no communicating wireless LAN client and then the duplex control section performs a switching process for switching the wireless LAN
15 base stations.

 17. The duplex system as set forth in claim 11,
 wherein the wireless LAN base station which is in the active state has a communication monitoring section for monitoring a communication state of the local wireless LAN
20 base station, and

 wherein when the local wireless LAN base station predicts a fault, the communication monitoring section is configured to confirm that there is no communicating wireless LAN client and then the duplex control section
25 performs a switching process for switching the wireless LAN base stations.

 18. The duplex system as set forth in claim 12,

wherein the wireless LAN base station which is in the active state has a communication monitoring section for monitoring a communication state of the local wireless LAN base station, and

5 wherein when the local wireless LAN base station predicts a fault, the communication monitoring section is configured to confirm that there is no communicating wireless LAN client and then the duplex control section performs a switching process for switching the wireless LAN
10 base stations.

19. The duplex system as set forth in claim 13,

wherein the wireless LAN base station which is in the active state has a communication monitoring section for monitoring a communication state of the local wireless LAN
15 base station, and

wherein when the local wireless LAN base station predicts a fault, the communication monitoring section is configured to confirm that there is no communicating wireless LAN client and then the duplex control section
20 performs a switching process for switching the wireless LAN base stations.

20. The duplex system as set forth in claim 14,

wherein the wireless LAN base station which is in the active state has a communication monitoring section for
25 monitoring a communication state of the local wireless LAN base station, and

wherein when the local wireless LAN base station

predicts a fault, the communication monitoring section is configured to confirm that there is no communicating wireless LAN client and then the duplex control section performs a switching process for switching the wireless LAN
5 base stations.

21. The duplex system as set forth in claim 15,
wherein the wireless LAN base station which is in the active state has a communication monitoring section for monitoring a communication state of the local wireless LAN
10 base station, and

wherein when the local wireless LAN base station predicts a fault, the communication monitoring section is configured to confirm that there is no communicating wireless LAN client and then the duplex control section
15 performs a switching process for switching the wireless LAN base stations.